

REMARKS

Claims 2-7, 9-15, 18-20, and 22-25 were pending in the present application. Claims 9, 10, and 12 have been amended and claims 2-7, 14, 17-20, and 22-25 have been canceled without prejudice to or disclaimer of the subject matter contained therein. New claims 26 and 27 have been added. Support for the foregoing amendments and new claims can be found throughout the specification and claims as originally filed, for example, on page 6, lines 17-46 and page 18, line 40 through page 28, line 3. No new matter enters by way of this amendment. Upon entry of the foregoing amendment, claims 9-13, 15, and 26-27 will be pending.

Reexamination of the application and reconsideration of the rejections and objections are respectfully requested in view of the above amendments and the following remarks, which follow the order set forth in the Office Action.

I. Election/Restriction

Applicants acknowledge the finality of the restriction requirement, but maintain their traversal set forth in Applicants' Response to Restriction Requirement filed March 21, 2007. To facilitate prosecution, non-elected claims 2-7, 14, 18-19, and 22-25 have been canceled without prejudice to, or disclaimer of, the underlying subject matter.

II. Claim Objections

Claims 9-13, 15, 17, and 20 have been objected to under 37 CFR 1.75(c), as allegedly "being of improper dependent form for failing to further limit the subject matter of a previous claim." *Office Action*, at page 5. In view of the amendments to the claims, the objections are moot, and Applicants respectfully request reconsideration and withdrawal of the objections to the claims.

III. Claim Rejections under 35 U.S.C. § 112, First Paragraph, Enablement

Claims 9-13, 15, 17, and 20 have been rejected under 35 U.S.C. § 112, first paragraph as allegedly containing subject matter which was not described in the specification in such a way so as to enable those skilled in the art to make and/or use the invention commensurate in scope with the claims. *Office Action* at pages 6-8. Applicants respectfully disagree.

The Examiner acknowledges that the specification is “enabling for a method of identifying herbicidally active substances using a polypeptide having sucrose-6-phosphate phosphatase activity encoded by DNA (or polynucleotide) molecules of SEQ ID NO: 1,” however, argues that the specification “does not reasonably provide enablement for a method of identifying herbicidally active substances using variant polypeptides encoded by DNA (or polynucleotide) molecules wherein DNA sequence is 55% identical to SEQ ID NO: 1 or functional equivalent thereof.” *Id.* at page 6.

Applicants have provided considerable direction and guidance in the specification and have presented working examples such that it is well within the level of ordinary skill in the art to practice the claimed invention without undue experimentation. For example, the specification discusses sucrose-6-phosphate phosphatase encoding sequences, such as SEQ ID NO: 1, as well as functional equivalents and variants having 55% sequence identity or greater. *See, e.g. Specification*, at page 4, lines 19-25 and page 10, line 20 through page 11, line 7. The specification also discloses methods for screening such sequences for sucrose-6-phosphatase activity, and provides working examples of the cloning, expression, and characterization of sucrose-6-phosphatase encoding sequences. *See, e.g., Specification*, at page 31, line 44 through page 33, line 2 and page 47, line 5 through page 51, line 34. For example, the specification provides an example for determining sucrose-6-phosphate phosphatase enzyme activity from protein extracts from recombinant *E. coli* expressing *N. tabacum* sucrose-6-phosphate phosphatase by measuring inorganic phosphate liberated in reactions with sucrose-6-phosphate. *See, Specification*, at page 51, lines 8-34 (Examples 5 and 6). Based on such disclosure, the skilled artisan could readily practice the claimed methods without undue experimentation.

Moreover, the MPEP states “[t]he test of enablement is not whether any experimentation is necessary, but whether, if experimentation is necessary, it is undue.” MPEP § 2164.01 (citing *In re Angstadt*, 537 F.2d 498, 504, 190 USPQ 214, 219 (CCPA 1976)). In addition, “the fact that experimentation may be complex does not necessarily make it undue, if the art typically engages in such experimentation.” *Id.* (citing *In re Certain Limited-Charge Cell Culture Microcarriers*, 221 USPQ 1165, 1174 (Int’l Trade Comm’n 1983), *aff’d. sub nom., Massachusetts Institute of Technology v. A.B. Fortia*, 774 F.2d 1104, 227 USPQ 428 (Fed. Cir. 1985)).

Accordingly, the specification enables the claimed invention without undue experimentation. Applicants respectfully request reconsideration and withdrawal of the rejection of claims 9-13, 15, 17, and 20 under 35 U.S.C. § 112, first paragraph.

IV. Claim Rejections Under 35 U.S.C. § 112, Second Paragraph

Claims 9-13, 15, 17, and 20 have been rejected under 35 U.S.C. § 112, second paragraph as allegedly failing to particularly point out and distinctly claim the subject matter. In particular, the Examiner alleges that the phrase “functional equivalent” is vague and indefinite because “it is unclear what other functional equivalency is meant or associated with, other than the specific sucrose-6-phosphate phosphatase activity that is defined in the specification.” *Office Action* at page 8. Applicants note that the amendments to delete the recitation of “functional equivalent” from the claims render this rejection moot. Reconsideration and withdrawal of the rejection of claims 9-13, 15, 17, and 20 under 35 U.S.C. § 112, second paragraph is respectfully requested.

V. Claim Rejections Under 35 U.S.C. § 112, First Paragraph, Written Description

Claims 17 and 20 have been rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. According to the Examiner, the claims contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. *Office Action*, at page 9.

Although Applicants respectfully disagree, to facilitate prosecution, claim 17 and 20 have been canceled without prejudice to, or disclaimer of, the underlying subject matter. Accordingly, the rejection of claims 17 and 20 under 35 U.S.C. § 112, first paragraph is moot. Applicants respectfully request reconsideration and withdrawal of this rejection.

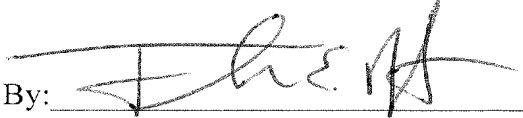
VI. Conclusion

For the foregoing reasons, claims 9-13, 15, and 26-27 are considered allowable. A Notice to this effect is respectfully requested. If any questions remain, the Examiner is invited to contact the undersigned at the number given below.

Respectfully submitted,

HUTCHISON LAW GROUP PLLC

Date: August 24, 2007

By: 

Thomas E. Holsten
Registration No. 46,098

P.O. Box 31686
Raleigh, NC 27612
+1.919.829.9600